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CHAPTER

History Taking and Examination

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History taking of a patient who has come to your OPD plays a very important role. Detailed history taking and thorough clinical examination and relevant investigations will give the accurate diagnosis and helps in the management of cases.

OBSTETRICS

Problems with teenage pregnancy

- *Medical:* Anemia, malnutrition, preeclampsia
- *Obstetrics:* Fetal malpresentation, cephalopelvic disproportion, preterm delivery.

Problems in pregnancies in women

Above 35 years age

- Increased incidence of chromosomal anomalies and fetal anomalies
- Increased incidence of obesity, hypertension, APH, IUGR, GDM, postdatism, cervical dystocia, incordinate uterine contractions, malpositions (OP), prolonged labor due to reduced elasticity of soft tissues and impaired mobility of joints, increased operative vaginal deliveries and its associated maternal and fetal complications and higher incidence of lactation failure.

History

- To assess the health status of the mother and the fetus.
- To assess fetal gestational age and to obtain baseline investigations.
- To organize continued obstetric care and risk assessment.
  - Name: Identification of the patient
  - Wife of:
  - Marital status:
  - Date of first examination:
  - Address (along with contact number):
  - Age: Extremes of age, i.e. teenage and elderly (30 or above) are obstetric risk factors
  - *Gravida*: Pregnant state, both present and past, irrespective of gestational age.
  - *Parity*: State of previous pregnancy beyond the period of viability
  - Gravida and para both refer to pregnancies and not live babies
  - Duration of marriage: Relevant to note the fecundity or fertility
  - Religion
  - Occupation: For interpreting the social status
  - Occupation of the husband.

Incidence of Down's syndrome is said to increase from **1:350** at **35** years to **1:109** at the age of **40** years and further to **1:32** at the age of **45** years.

- To assess the socioeconomic condition. to anticipate complications associated with low socioeconomic status like pre-eclampsia, anemia, prematurity

- To obtain an idea regarding affordability of the treatment provided
- To give proper antenatal advice regarding family planning.
  - Period of gestation in the diagnosis—to be expressed in terms of completed weeks.

Calculation

In early weeks of gestation, counting is done from first day of last menstrual period and in later weeks, it is done from the expected date of delivery.

Start the presentation noting her gravida, para status and duration of amenorrhea in months as presentation and never as complaint, e.g. A G2P1L1 presenting with amenorrhea of 8 months.....

If a pregnant lady has no complaints, it can be presented as admitted for safe confinement, if with complaints the nature and duration of complaints may be mentioned.

In a term pregnant lady, pain abdomen, features suggestive of preeclampsia, symptoms suggestive of labor need to be enquired like, leak per vaginum (PV), bleeding PV, headache, blurring of vision, etc. Perception of fetal movements can assure to some extent about the fetal well-being.

Chief Complaints

Categorically, the genesis of complaints are to be noted. If there are no complaints, general enquiry about her well-being has to be made, e.g. history of leak PV, bleed PV; history of pain abdomen.

History of Presenting Illness

Elaboration of the chief complaints has to be done regarding the onset, duration, severity, progression and use of any medications. History of pain abdomen (details need to be taken to differentiate between true and false labor pains, UTI, etc.).

Obstetric History

Married life and query about consanguinity has to be made (infertility, precious pregnancy, causes for congenital anomalies, etc.).

Parity Index

Mention about gravidity, parity, living issues, abortions (GPLA).

Complications associated with grand multipara (women who has given birth to at least 4 viable children): (1) Pendulous abdomen that leads to malpresentation; (2) Pronounced lordosis leads to increase in pelvic inclination and nonengagement of fetal head at term; (3) Medical problems like anemia, hypertension, GDM; (4) Multiple pregnancy. (5) Placenta praevia; (6) Contracted pelvis and osteomalacic changes in pelvis due to calcium deficiency; (7) Rupture uterus; (8) PPH.

It is summed up as: status of gravida, parity, number of deliveries, abortions (including MTPs) and living issue (Table 1).

Table 1: Details of obstetric history

No.	*Year and date*	*Pregnancy events*	*Labor events*	*Methods of delivery*	*Puerperium*	*Baby with breastfeeding and immunization details*
1						
2						

For example, G3P1L1A1

- List out the significant events during each trimester based on the duration of pregnancy.

Pregnancy events: History of hyperemesis, fever with rashes, HDP, GDM, thyroid and other medical disorders
Labor events: Ask about spontaneous/induced, duration of each pregnancy (to rule out previous preterm birth). Outcome, history of blood transfusion
Mode of delivery: Vaginal/by instrumentation, Cesearean section.
Baby: Age/sex, birth weight, admission in NICU, breastfeeding, duration of breastfeeding, milestones.

- Enquire about the duration from last pregnancy/last abortion.
- History of any contraceptive usage between last childbirth/abortion and present pregnancy.
- Rh-negative pregnancy—history of previous pregnancies and administration of anti-D immunoglobulin previously.

Rh-isoimmunization
Anti-D Ig is given prophylactically to all D negative women at 28 weeks of pregnancy and a second dose is given after delivery, preferably within 72 hours, if the infant is D positive. The second dose is required because the half-life of Ig is only 6 weeks.

History of Present Pregnancy

*Number of antenatal visits (booking status) and immunization status has to be noted.

Women with at least 3 antenatal visits, who have received 2 doses of injection TT and taken 100 tablets of iron and folic acid (with ultrasound desirable but not mandatory) are said to be booked.

- Number of antenatal visits
  - *Ideal:* Once every four weeks in the first 28 weeks, every 2 weeks till 36 weeks and weekly after 36 weeks.

RCH has agencies like JrHA(F), SrHA(F)/LHV, *Anganwadi* workers, ASHA workers, VHGs to take care of the ANCs and they are not deprived of routine antenatal care, but the minimum prescribed visits are given by doctor and the rest by the above said agencies, to make them convenient. In simple terms, *Instead of they going to, healthcare providers, the care provider goes to their doors.*

- To decrease the load in antenatal clinics, RCH program has advised 3 antenatal visits in an uncomplicated pregnancy at least once in each trimester with an additional visit in the 3rd trimester:
  - As soon as she becomes pregnant
  - Once in 2nd trimester
  - At 32 weeks.
  - At 36 weeks or once in the last trimester.

  WHO Recommendation—minimun 4 visits 1 at 16 weeks, 28 weeks, 32 and 36 weeks.

However, in case of high-risk pregnancies, the number of visits can be increased/individualized based on the patient's condition.

Iron supplementation (WHO)—60 mg elemental iron and 250 μg folic acid once or twice daily for 6 months in pregnancy and 3 months postpartum.
Ministry of Health, Government of India, now recommends 100 mg elemental iron with 500 μg folic acid in the second half of pregnancy for a period of at least 100 days.

For example:

Effects of UTI in pregnancy:
- Preterm delivery
- Low birth weight
- Preeclampsia
- Anemia

1st Trimester

Symptoms of hyperemesis, threatened abortion, etc. Any medication or radiation exposure, fever with rashes (congenital rubella syndrome), UTI during first trimester has to be enquired along

*Certain symptoms commonly seen in particular trimesters have to be ruled out by taking negative history.

Table 2: True labor pain vs false labor pain

Feature	*True labor pains*	*False labor pains*
Duration of gestation	Usually happens at term	Any duration of gestation in T3
Nature of pain	Intermittent, increasing in severity and frequency	No specific pattern
Location	Low back	Abdomen
Radiation	Lower abdomen and thighs	No radiation
Relieving factors	None	Enema and sedation
Association	Vaginal discharge/leak/blood	Constipation/UTI symptoms
Examination	Uterus acting and cervical changes	None

with any medical or surgical events during pregnancy.

2nd Trimester

Date of quickening needs to be asked for symptoms of UTI, GDM, etc.

Quickening—first perception of fetal movements by the mother.

3rd Trimester

- Symptoms of anemia, preeclampsia.
- History of leaking PV, pedal edema, pain abdomen—to differentiate between true and false labor pains (Table 2).

Menstrual History

Previous cycles: Duration and amount of flow.
LMP: First day of last normal menstrual period
EDD: Expected date of delivery.
Calculation: As per Naegele's formula it is obtained as follows (in regular cycles):
EDD = LMP + (9 months) + 7 days.

High-quality ultrasound measurement of the embryo or fetus during the first trimester of pregnancy is the most accurate method of establishing or confirming gestational age.

If the pregnancy is the result of assisted reproductive technology (ART), the clinician should use the ART-derived gestational age to assign the EDD. For example, for a pregnancy that results from *in vitro* fertilization, the clinician should use the age of the embryo and the date of the transfer to establish the EDD.

As soon as the clinician has data from the last menstrual period, the first accurate ultrasound examination, or both, the gestational age and the EDD should be calculated, discussed with the patient, and recorded clearly in the patient's medical record.

For research and surveillance purposes, the clinician should use the best obstetric estimate, rather than calculations based only on the last menstrual period, to determine gestational age.

Subsequent changes to the EDD should only be made in rare circumstances, should be discussed with the patient, and should be recorded clearly in the patient's medical record.

Past History

Medical

TB, asthma, hypertension, DM, epilepsy, cardiac disorders, thyroid disorders.

Surgical

General/gynecological.

Family History

Hypertension, DM, TB, blood dyscrasias, multiple pregnancies, congenital anomalies, etc.

Personal History

Enquire about diet, appetite, sleep, bowel and bladder habits and any health affecting habits. Previous history of blood transfusion, steroid therapy, drug allergy.

Diet recommendations in pregnancy
- Extra 300 kcal/day, 10 g protein/day
- RDA of iron in pregnancy is 30 mg.

Importance

- Anemia in pregnancy (advice is to be given to have food rich in iron, folate, vitamin B_{12})
- Diabetes in pregnancy—diet for maintainance of sugar levels and for decision regarding insulin dosage.

Summary

Mrs X aged _____ years, w/o _____ with socioecomic status _____ with _____ period of gestation has come with complaints of _____

Provisional Diagnosis

Examination

General Physical Examination

- *Build*—obese/average/thin.
- *Nutrition*—good/average/poor.
- *Height*—short stature is likely to be associated with a small pelvis (4.7 feet or lesser is considered to be short stature in India).
- *Weight*—for adequate weight gain during pregnancy (Table 3).

Table 3: Recommended weight gain in pregnancy

	BMI (pre-pregnancy)	Recommended weight gain (kg)
Low	<19.8	12.5–18
Normal	19.8–26	11.5–16
High	26–29	7–11.5
Obese	>29	7

Range of weight gain
- Women carrying twins—16–20 kg
- Young adolescents—weight gain at upper end of the range
- Short women—weight gain at the lower end of the range

Rate of weight gain in the second half of pregnancy is 500 g/week.

(BMI becomes important or is of value only when prepregnancy weight is known)

- *Pallor, icterus, cyanosis, clubbing, lymphadenopathy* or *edema*
- *Tongue, gums, teeth* and *tonsils*—for evidence of infections, malnutrition (glossitis, cheilosis, bald tongue, etc.)
- *Neck*—neck veins, lymph nodes and thyroid examination.
- *Edema of legs*—pitting type.

Physiological edema subsides after 12 hours of recumbent posture/rest and is usually more by evening. It is limited to below ankle.

It could be physiological or pathological due to preeclampsia, anemia with hypoproteinemia, cardiac failure or nephrotic syndrome or hepatic failure.

Vitals

Pulse Rate

- BP—disappearance of sounds (Korotkoff 5) is taken as the representation of DBP in pregnancy (because of presence of large fistula at the placental site)
- Temperature if relevant/required
- Respiratory rate and type of respiration.

Systemic Examination

In pregnancy systolic murmurs more than grade II, any diastolic murmur is considered to be pathological.

Sometimes cardiac diseases are diagnosed only during pregnancy.

- CVS—S1S2 + presence/absence of murmurs
- RS—bilateral NVBS heard, no added sounds
- CNS—within normal limits.
- Breasts—to be examined for presence of any lesions/growth/mass.

See for normal pregnancy changes—increase in size of breast, montgomery tubercles, secondary areola.

Nipples size and shape need to be assessed for breastfeeding postpartum.

Positions

- Arms by the sides (A)
  - ***Arms raised above the head (B)***
  - ***Hands pressing against waist (to contract pectoral muscles)*** (C)
- Abdomen—for any palpable organs.

Obstetric Examination

A verbal consent is taken for the examination and the abdomen is fully exposed.

Position

Dorsal with thighs slightly flexed.

The examiner stands on the right side of the patient.

Inspection

To note:

- Whether the uterine ovoid is longitudinal, transverse or oblique
- The contour of the uterus—fundal notching, convex or flattened anterior wall, cylindrical or spherical shape
- Any undue enlargement of uterus
- Any skin changes over the abdomen or scar marks over the abdomen
- Fundus of the uterus is just palpable over the symphysis pubis at 12 weeks.

Palpation

- Height of the uterus—uterus is centralized if it is deviated. The ulnar border of the left hand is placed at the uppermost level of the fundus and an approximate duration of pregnancy is ascertained in terms of weeks of gestation
- SFH can be measured with a tape.

Obstetric Grips (Leopolds Maneuver) (Fig. 1)

1. *Fundal grip:* Palpation is done facing the patient's face. The whole fundal area is palpated using both hands laid flat on it to find out which pole of the fetus is in the fundus.
   - Broad, soft, irregular mass: Breech
   - Smooth, hard, globular mass: Head
   - Neither of the poles palpated in the fundus: Transverse Lie
2. *Lateral or umbilical grips:* Palpation is done facing the patient's face.

   Hands are placed flat on either side of the umbilicus to palpate one after the other, the sides of the uterus to find out the position of back, limbs and anterior shoulder from above downwards.
   - Smooth, curved, uniformly resistant feel—back
   - Irregular knob like structures—limbs
3. *First pelvic grip (Leopold's third maneuver):*

   Done by facing the patients face to ascertain presenting part, attitude, ballotabilty

   The outstretched thumb and four fingers of the right hand are placed over the lower pole of the uterus, keeping the ulnar border of the palm over pubic symphysis to ascertain the presenting part and engagement. The unengaged head can move freely from side to side and both the poles remain at the same level.
4. *Second pelvic grip (Pawlik's grip or Leopold's fourth maneuver):*

   It is done facing the patient's feet.

   Four fingers of both the hands are placed on either side of the midline in the lower pole of the uterus and parallel to inguinal ligament. The fingers are pressed

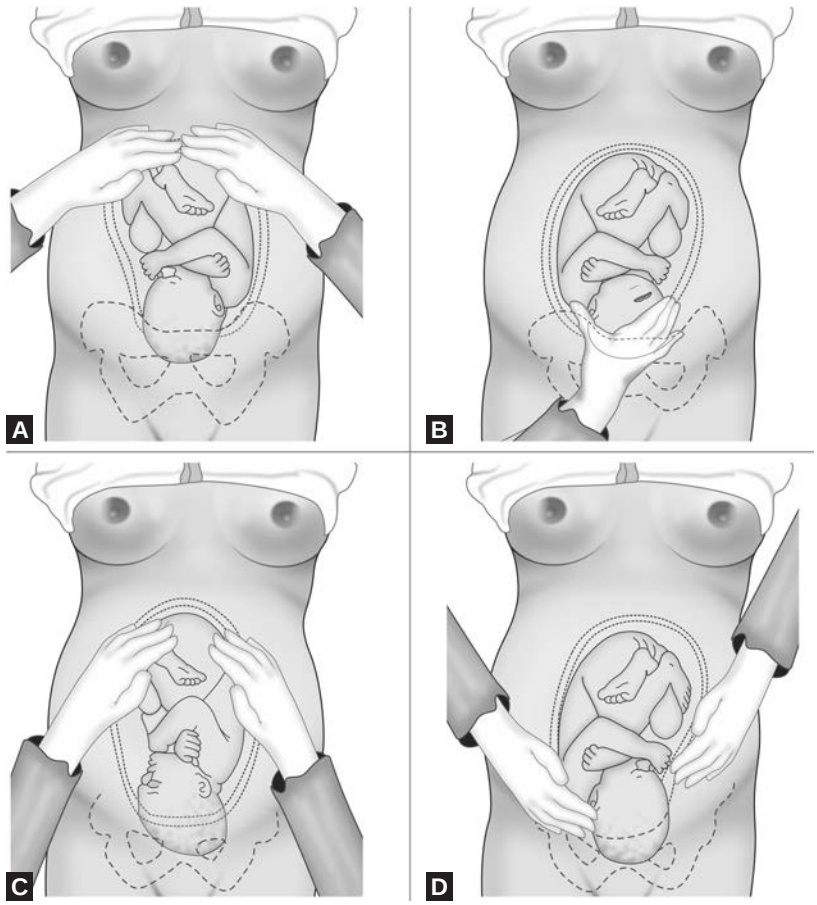

Fig. 1: Obstetric palpation—Leopold's maneuvers

downwards and backwards in a manner of approximation of finger tips to palpate the part occupying the lower pole of uterus.
Engagement of head: Head is engaged when the greatest horizontal plane, the biparietal diameter, has passed the plane of pelvic brim.

Per Speculum Examination

Look for any:

- Leak PV (in cases of PROM)
- OS open/closed (preterm, incomplete/inevitable abortion)
- Cervical length (preterm).

Per Vaginal Examination

- Cervix—position, consistency, effacement in cm, dilatation of cervical os presenting part—station, position
- Presence/absence of membranes
- Pelvic assessment (done in primigravidas by 38 weeks in multigravida previous uncomplicated vaginal delivery itself is a proof of adequacy of pelvis)
- Points to be noted in pelvic assessment
  - Sacral promontory
  - Sacral curvature
  - Sacrosciatic notch
  - Pelvic side walls